CLAIMS

What is claimed is:

1. A mounting assembly for a rotational position sensor for mounting on a first member and sensing a rotational position of a second member supported on the first member for rotation relative thereto, comprising:

a transfer shaft having a first end cooperatively engageable with a rotatable sensor element of the sensor for rotating the sensor element when the transfer shaft is rotated, and a second end cooperatively engageable with the second member for rotation of the transfer shaft therewith; and

a housing for supporting and holding the sensor and the transfer shaft with the first end of the shaft in engagement with the rotatable sensor element and the second end positioned for engaging the rotatable second member, the housing being mountable in a fixed position and orientation on the first member such that the second end of the transfer shaft is engaged with the rotatable second member for rotation therewith.

2. The mounting assembly of claim 1, wherein the housing includes an elongate bracket having one end for mounting on the first member, and an opposite end for mounting the sensor thereon in the fixed position and orientation and including a hole therethrough for holding the second end of the transfer shaft in position for engagement with the rotatable second member.

3. The mounting assembly of claim 1, wherein the ends of the transfer shaft include blades cooperatively receivable in slots in the sensor element and the rotatable second member, respectively, extending transversely to an axis of rotation of the second member.

4. The mounting assembly of claim 1, wherein the first member comprises a frame member on a front end of an agricultural combine, and the second member comprises a pivot pin fixedly mounted on a feeder for supporting the feeder for rotation on the frame member.

5. A mounting assembly for a rotational position sensor for mounting on a frame member of an agricultural combine and sensing a rotational position of a feeder supported on the combine for rotational movement relative thereto, comprising:

a transfer shaft having a first end cooperatively engageable with a rotatable element of the position sensor and an opposite second end cooperatively engageable with a pivot pin on the feeder through which an axis of rotation of the feeder extends, such that rotation of the feeder and the pin about the axis will rotate the transfer shaft;

a housing for holding the transfer shaft with the first end in engagement with the rotatable element of the sensor for rotation therewith; and

a mounting bracket having a mounting end for mounting on the frame member such that an opposite end of the bracket will be positioned in a predetermined position in closely spaced relation to the pivot pin of the feeder, the opposite end including a hole therethrough aligned with the axis of rotation when in the predetermined position and being adapted for holding the second end of the transfer shaft in position for engagement with the pivot pin and supporting the housing and the sensor in axial alignment therewith.

6. The mounting assembly of claim 5, wherein the ends of the transfer shaft include blades cooperatively receivable in slots in the rotatable element of the sensor and the rotatable second member, respectively, extending transversely to an axis of rotation of the second member.

7. The mounting assembly of claim 5, wherein the second end of the transfer shaft is smaller in transverse extent compared to the first end and the hole in the end of the mounting bracket has a large enough transverse extent so as to allow passage of the second end of the transfer shaft therethrough but not the first end.

8. A rotational position sensor for mounting on a frame member of an agricultural combine and sensing a rotational position of a feeder supported on the combine for rotational movement relative thereto, comprising:

a sensor including a rotatable element and circuitry for outputting a signal indicative of a rotational position of the rotatable element;

a transfer shaft having a first end portion including an element cooperatively engageable with the rotatable element of the sensor for rotation therewith and an opposite second end portion including an element cooperatively engageable with a pivot pin on the feeder through which an axis of rotation of the feeder extends, such that rotation of the feeder and the pin about the axis will rotate the transfer shaft and the rotatable element of the sensor; and

a housing for receiving the transfer shaft with the element of the first end portion thereof in engagement with the rotatable element of the sensor for rotation therewith, including a bracket having a mounting end for mounting on the frame member such that an opposite end of the bracket will be positioned in a predetermined position in closely spaced relation to the pivot pin of the feeder, the opposite end including a hole therethrough that will be at least generally aligned with the axis of rotation when in the predetermined position and being adapted for holding the second end portion of the transfer shaft in position for cooperative engagement of the element thereof with the

pivot pin and supporting the housing and the sensor at least generally in axial alignment therewith.

9. The rotational position sensor of claim 8, wherein the end portions of the transfer shaft include blades cooperatively receivable in slots in the rotatable element of the sensor and the rotatable second member, respectively, extending transversely to an axis of rotation of the pivot pin.